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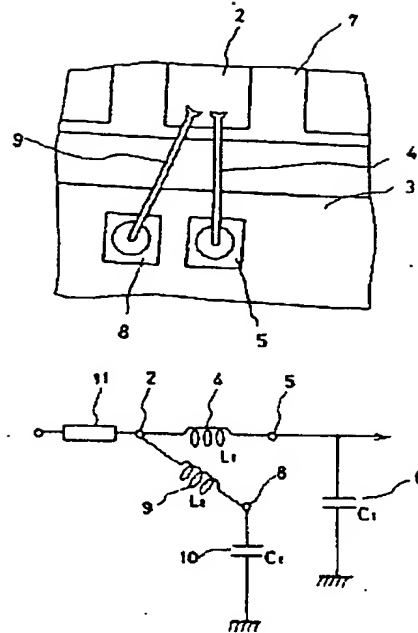
APPLICATION DATE : 29-08-90
APPLICATION NUMBER : 02225058

APPLICANT : HITACHI TOBU SEMICONDUCTOR LTD;

INVENTOR : KAMATA CHIYOSHI;

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TITLE : SEMICONDUCTOR DEVICE AND ITS COMPONENT PARTS



ABSTRACT : PURPOSE: To suppress the deterioration of a signal by providing a regulating means for matching the inductance of a signal-transmitting bonding wire and the ground electrostatic capacitance of the end of the signal-transmitting bonding wire to a transmission impedance.

CONSTITUTION: A pad 2 for transmitting very high frequency signals is provided on the package 7 side and a regulating bonding pad 8 is arranged in the manner of adjoining a pad 5 provided on the chip 3 side. A signal-transmitting bonding wire 4 by means of a metal wire is connected between the pads 2 and 5 and a regulating bonding wire 9 is connected between the pads 2 and 8. Therefore, an inductance L_2 by a wire 9 and a circuit by a stray electrostatic capacitance 10(C_2) formed between the pads 2 and 8 relative to an inductance L_1 by a wire 4 and a circuit by a stray electrostatic capacitance 6(C_1) are added to the pad 2. In this case, impedance is regulated by change of the length and diameter of the wire 9. Thus, it is possible to conduct impedance matching and to raise a maximum frequency.

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